UNMAPPED SITES CONT.

Name:	*JOUNI RESIDENCE*
Location	*11228 CHRISTINS CT.*
City:	*HAGERSTOWN*
State:	*MD*
Zip	*21742*
County:	*WASHINGTON*
Release	*YES*
Cleanup	*YES*
Status:	*CLOSED*

VISTA Address*:	**ACT TRUCK STOP** **HOPEWELL RD** **HAGERSTOWN, MD 0**	VISTA ID#:	65068853
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	96-0843PG1

Agency Address:	*SAME AS ABOVE*
Case Number:	*96-0843PG1*
Name:	*ACT TRUCK STOP*
Location	*HOPEWELL RD*
City:	*HAGERSTOWN*
State:	*MD*
County:	*WASHINGTON*
Status:	*OPEN*
Fields Not Reported by the Source Agency for this Site:	*Zip(1), Release(1), Cleanup(1)*

VISTA Address*:	**TALLEY STEEL CORP** **9411 EARLY DRIVE** **HAGERSTOWN, MD 21740**	VISTA ID#:	65714559
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	96-1089AL

Agency Address:	*SAME AS ABOVE*
Case Number:	*96-1089AL*
Name:	*TALLEY STEEL CORP*
Location	*9411 EARLY DRIVE*
City:	*HAGERSTOWN*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*
Status:	*OPEN*
Fields Not Reported by the Source Agency for this Site:	*Release(1), Cleanup(1)*

VISTA Address*:	CHEWSVILLE COMMUNITY CNTR/HERMAN A. LEWI 11735 WHITE HALL RD. HAGERSTOWN, MD 21742	VISTA ID#:	65719923
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	99-0846WA

Agency Address:	SAME AS ABOVE
Case Number:	99-0846WA
Name:	CHEWSVILLE COMMUNITY CNTR/HERMAN A. LEWIS ESTATE
Location	11735 WHITE HALL RD.
City:	HAGERSTOWN
State:	MD
Zip	21742
County:	WASHINGTON
Release	NO
Cleanup	NO
Status:	CLOSED

VISTA Address*:	WASHINGTON COUNTY HOSPITAL 251 E. ANTITAM ST. HAGERSTOWN, MD 21740	VISTA ID#:	65717330
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	98-0603WA

Agency Address:	SAME AS ABOVE
Case Number:	98-0603WA
Name:	WASHINGTON COUNTY HOSPITAL
Location	251 E. ANTITAM ST.
City:	HAGERSTOWN
State:	MD
Zip	21740
County:	WASHINGTON
Release	NO
Status:	CLOSED
Fields Not Reported by the Source Agency for this Site:	Cleanup(1)

VISTA Address*:	EXXON 17703 VIRGINIA AVE. HAGERSTOWN, MD 21740	VISTA ID#:	65718036
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	98-1418WA

Agency Address:	SAME AS ABOVE
Case Number:	98-1418WA
Name:	EXXON
Location	17703 VIRGINIA AVE.
City:	HAGERSTOWN
State:	MD
Zip	21740

County:	WASHINGTON
Release	NO
Cleanup	NO
Status:	CLOSED

VISTA Address*:	312 GARLANG ST HAGERSTOWN, MD 21740	VISTA ID#:	65713729
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	93-1194WA
Agency Address:	SAME AS ABOVE		
Case Number:	93-1194WA		
Location	312 GARLANG ST		
City:	HAGERSTOWN		
State:	MD		
Zip	21740		
County:	WASHINGTON		
Status:	CLOSED		
Status:	CLOSED		
Fields Not Reported by the Source Agency for this Site:	Name(1), Release(2), Cleanup(2)		

VISTA Address*:	LONG MEADOW FIRE DEPT HAGERSTOWN, MD 21740	VISTA ID#:	502781101
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	93-2049WA
Agency Address:	SAME AS ABOVE		
Case Number:	93-2049WA		
Name	LONG MEADOW FIRE DEPT		
City:	HAGERSTOWN		
State:	MD		
Zip	21740		
County:	WASHINGTON		
Status:	CLOSED		
Status:	CLOSED		
Fields Not Reported by the Source Agency for this Site:	Location(1), Release(2), Cleanup(2)		

VISTA Address*:	HERITAGE ACADEMY RT 2 HAGERSTOWN, MD 21740	VISTA ID#:	65082184
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	92-0274WA
Agency Address:	SAME AS ABOVE		
Case Number:	92-0274WA		
Name	HERITAGE ACADEMY		
Location	RT 2		
City:	HAGERSTOWN		
State:	MD		

Zip	21740
County:	WASHINGTON
Status:	CLOSED
Status:	CLOSED
Fields Not Reported by the Source Agency for this Site:	Release(2), Cleanup(2)

VISTA Address*:	DITTO PROPERTY EAST OAKRIDGE DR. HAGERSTOWN, MD 0	VISTA ID#:	65721696
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	99-2894WA

Agency Address:	SAME AS ABOVE
Case Number:	99-2894WA
Name	DITTO PROPERTY
Location	EAST OAKRIDGE DR.
City:	HAGERSTOWN
State:	MD
County:	WASHINGTON
Release	YES
Status:	OPEN
Fields Not Reported by the Source Agency for this Site:	Zip(1), Cleanup(1)

VISTA Address*:	MILDRED HEP RESIDENCE RT 9,BOX 237 HAGERSTOWN, MD 21740	VISTA ID#:	65713803
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	93-1426WA

Agency Address:	SAME AS ABOVE
Case Number:	93-1426WA
Name	MILDRED HEP RESIDENCE
Location	RT 9,BOX 237
City:	HAGERSTOWN
State:	MD
Zip	21740
County:	WASHINGTON
Status:	CLOSED
Status:	CLOSED
Fields Not Reported by the Source Agency for this Site:	Release(2), Cleanup(2)

VISTA Address*:	MOBILE HOME 18620 N. HAVEN ST. HAGERSTOWN, MD 21740	VISTA ID#:	65715236
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	97-0623MO1

Agency Address:	SAME AS ABOVE
Case Number:	97-0623MO1

UNMAPPED SITES CONT.

Name	*MOBILE HOME*
Location	*18620 N. HAVEN ST.*
City:	*HAGERSTOWN*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*
Release	*YES*
Cleanup	*YES*
Status:	*CLOSED*

VISTA Address*:	**HAGERSTOWN JR. COLLEGE HAGERSTOWN, MD 21740**	VISTA ID#:	502779863
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	90-0567WA

Agency Address:	*SAME AS ABOVE*
Case Number:	*90-0567WA*
Name	*HAGERSTOWN JR. COLLEGE*
City:	*HAGERSTOWN*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*
Status:	*OPEN*
Fields Not Reported by the Source Agency for this Site:	*Location(1), Release(1), Cleanup(1)*

VISTA Address*:	**SHEETZ CONV. STORE N. POTAMAC ST HAGERSTOWN, MD 21740**	VISTA ID#:	65710933
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	90-1791WA

Agency Address:	*SAME AS ABOVE*
Case Number:	*90-1791WA*
Name	*SHEETZ CONV. STORE*
Location	*N. POTAMAC ST*
City:	*HAGERSTOWN*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*
Status:	*CLOSED*
Fields Not Reported by the Source Agency for this Site:	*Release(1), Cleanup(1)*

VISTA Address*:	**MARK LOGSDON RT 58 SADEON POINT RD HAGERSTOWN, MD 21740**	VISTA ID#:	65710600
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	90-0714WA

Agency Address:	*SAME AS ABOVE*
Case Number:	*90-0714WA*

Name	*MARK LOGSDON*
Location	*RT 58 SADEON POINT RD*
City:	*HAGERSTOWN*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*
Status:	*CLOSED*
Fields Not Reported by the Source Agency for this Site:	*Release(1), Cleanup(1)*

VISTA Address*:	**MAPLE LEAF TACK SHOP GARISSHOP RD. HAGERSTOWN, MD 0**	VISTA ID#:	65719419
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	99-0281WA

Agency Address:	*SAME AS ABOVE*
Case Number:	*99-0281WA*
Name	*MAPLE LEAF TACK SHOP*
Location	*GARISSHOP RD.*
City:	*HAGERSTOWN*
State:	*MD*
County:	*WASHINGTON*
Release	*YES*
Cleanup	*YES*
Status:	*CLOSED*
Fields Not Reported by the Source Agency for this Site:	*Zip(1)*

VISTA Address*:	**HAGERSTOWN STATE POLICE BARRACKS 18345 COLONEL HENRY DOUGLAS DR. HAGERSTOWN, MD 21740**	VISTA ID#:	65717460
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	98-0745WA

Agency Address:	*SAME AS ABOVE*
Case Number:	*98-0745WA*
Name	*HAGERSTOWN STATE POLICE BARRACKS*
Location	*18345 COLONEL HENRY DOUGLASDR.*
City:	*HAGERSTOWN*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*
Release	*NO*
Status:	*OPEN*
Fields Not Reported by the Source Agency for this Site:	*Cleanup(1)*

VISTA Address*:	PROPERTY ANTIETAM DRIVE HAGERSTOWN, MD 21740	VISTA ID#:	65713566
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	93-0675WA

Agency Address:	SAME AS ABOVE
Case Number:	93-0675WA
Name	PROPERTY
Location	ANTIETAM DRIVE
City:	HAGERSTOWN
State:	MD
Zip	21740
County:	WASHINGTON
Status:	CLOSED
Status:	CLOSED
Fields Not Reported by the Source Agency for this Site:	Release(2), Cleanup(2)

VISTA Address*:	ROYAL CROWN COLA 18526 HETTZER DR. HAGERSTOWN, MD 0	VISTA ID#:	65721797
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	99-3008WA

Agency Address:	SAME AS ABOVE
Case Number:	99-3008WA
Name	ROYAL CROWN COLA
Location	18526 HETTZER DR.
City:	HAGERSTOWN
State:	MD
County:	WASHINGTON
Release	YES
Status:	OPEN
Fields Not Reported by the Source Agency for this Site:	Zip(1), Cleanup(1)

VISTA Address*:	HOME OIL CO. VIRGINIA AVE HAGERSTOWN, MD 21740	VISTA ID#:	65082715
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	92-1000WA

Agency Address:	SAME AS ABOVE
Case Number:	92-1000WA
Name	HOME OIL CO.
Location	VIRGINIA AVE
City:	HAGERSTOWN
State:	MD
Zip	21740
County:	WASHINGTON

Status:	*OPEN*
Status:	*OPEN*
Fields Not Reported by the Source Agency for this Site:	*Release(2), Cleanup(2)*

VISTA Address*:	**MONTGOMERY WARDS AUTO CENTER VALLEY MALL RD. HAGERSTOWN, MD 21740**	VISTA ID#:	65713488
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	93-0469WA

Agency Address:	*MONTGOMERY WARDS AUTO CENTER VALLEY MALL RD. HAGAERSTOWN, MD 21740*
Case Number:	*93-0469WA*
Name	*MONTGOMERY WARDS AUTO CENTER*
Location	*VALLEY MALL RD.*
City:	*HAGAERSTOWN*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*
Release Status:	*YES* *CLOSED*
Release Status:	*YES* *CLOSED*
Fields Not Reported by the Source Agency for this Site:	*Cleanup(2)*

VISTA Address*:	**HOMESTEAD SITE HOMESTEAD ROAD HAGERSTOWN, MD 21740**	VISTA ID#:	65712874
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	92-1736WA

Agency Address:	*HOMESTEAD SITE HOMESTEAD ROAD BIG POOL, MD 21740*
Case Number:	*92-1736WA*
Name	*HOMESTEAD SITE*
Location	*HOMESTEAD ROAD*
City:	*BIG POOL*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*
Status:	*CLOSED*
Status:	*CLOSED*
Fields Not Reported by the Source Agency for this Site:	*Release(2), Cleanup(2)*

VISTA Address*:	MOLTEN MFG. CO LEITERSBURG PIKE HAGERSTOWN, MD 21740	VISTA ID#:	65087540
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	92-0784WA

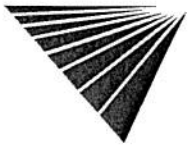
Agency Address:	MOLTEN MFG. CO LEITERSBURG PIKE LEITERSBURG, MD 21740
Case Number:	92-0784WA
Name	MOLTEN MFG. CO
Location	LEITERSBURG PIKE
City:	LEITERSBURG
State:	MD
Zip	21740
County:	WASHINGTON
Status:	CLOSED
Status:	CLOSED
Fields Not Reported by the Source Agency for this Site:	Release(2), Cleanup(2)

VISTA Address*:	DOUBSWOOD PARK DOWNSVILLE PIKE HAGERSTOWN, MD 21740	VISTA ID#:	65076244
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	93-1717WA

Agency Address:	DOUBSWOOD PARK DOWNSVILLE PIKE DOWNSVILLE, MD 21740
Case Number:	93-1717WA
Name	DOUBSWOOD PARK
Location	DOWNSVILLE PIKE
City:	DOWNSVILLE
State:	MD
Zip	21740
County:	WASHINGTON
Status:	CLOSED
Status:	CLOSED
Fields Not Reported by the Source Agency for this Site:	Release(2), Cleanup(2)

VISTA Address*:	NEWELL ENTERPRISES INC. P. O. BOX 1157 HAGERSTOWN, MD 21740	VISTA ID#:	1409508
NFRAP / SRC# 18		EPA ID:	0303789

Agency Address:	SAME AS ABOVE
EPA ID:	MDD168749869
Site ID:	0303789
EPA Region:	03
USGS Hydrologic Unit Code:	02070004



UNMAPPED SITES CONT.

Ownership Type:	*PRIVATE*
Federal Facility Indicator:	*NOT A FEDERAL FACILITY*
NPL Status:	*NOT ON THE NPL*
Hazardous Waste Docket Flag:	*NOT ON THE HAZARDOUS WASTEDOCKET*
Site Incident Category Description	*GROUNDWATER*
Action:	*DISCOVERY*
Action Lead:	*STATE, FUND FINANCED*
Actual Completion Date:	*NOVEMBER 6, 1989*
Action:	*PRELIMINARY ASSESSMENT*
Action Qualifier	*LOW*
Action Lead:	*STATE, FUND FINANCED*
Actual Start Date	*MAY 16, 1990*
Actual Completion Date:	*DECEMBER 13, 1990*
Action:	*SCREENING SITE INSPECTION*
Action Qualifier	*NFRAP (NO FUTHER REMEDIAL ACTION PLANNED*
Action Lead:	*STATE, FUND FINANCED*
Actual Start Date	*JANUARY 1, 1993*
Actual Completion Date:	*MARCH 11, 1994*
Operable Unit ID:	*00*
Operable Unit Name:	*SITEWIDE*
Alias ID:	*101*
Alias Name:	*NEWELL ENTERPRISES INC.*
Fields Not Reported by the Source Agency for this Site:	*Financial Management System ID(1), Action Qualifier(1), Scheduled Start Date(3), Scheduled Completion Date(3), Actual Start Date(1), Description(1), Address(1)*

VISTA Address*:	**WASH.CO. WATER SEWER DEPT./MAUGANSVILL S. MAIN ST. HAGERSTOWN, MD 21740**	VISTA ID#:	65716711
STATE LUST - State Leaking Underground Storage Tank / SRC# 1275		Agency ID:	97-2370WA

Agency Address:	*WASH.CO. WATER SEWER DEPT./MAUGANSVILL* *S. MAIN ST.* *MAUGANSVILLE, MD 21740*
Case Number:	*97-2370WA*
Name	*WASH.CO. WATER SEWER DEPT./MAUGANSVILLE PUMPING STATION*
Location	*S. MAIN ST.*
City:	*MAUGANSVILLE*
State:	*MD*
Zip	*21740*
County:	*WASHINGTON*

UNMAPPED SITES CONT.

Release Status:	*NO*
	CLOSED
Fields Not Reported by the Source Agency for this Site:	*Cleanup(1)*

SITE ASSESSMENT REPORT

DESCRIPTION OF DATABASES SEARCHED

A) DATABASES SEARCHED TO 1 MILE

NPL
SRC#: 19

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for National Priorities List was August, 2000.

The NPL Report is the US EPA's registry of the nation's worst uncontrolled or abandoned hazardous waste sites. NPL sites are targeted for possible long-term remedial action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980.

CORRACTS
SRC#: 14

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for RCRIS Corrective Action Sites was June, 2000.

The CORRACTS database contains information concerning RCRA facilities that have conducted, or are currently conducting a corrective action. A Corrective Action Order is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may also be imposed as a requirement of receiving and maintaining a TSDF permit.

RCRIS-TSDC
SRC#: 556

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for RCRIS TSDs Subject to Corrective Action was June, 2000.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDCs are treatment, storage and/or disposal facilities that are subject to corrective action under RCRA.

B) DATABASES SEARCHED TO 1/2 MILE

CERCLIS
SRC#: 17

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Comprehensive Environmental Response, Compensation and Liability Information Sys was August, 2000.

The CERCLIS database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste sites. These sites have either been investigated, or are currently under investigation by the U.S. EPA for the release, or threatened release of hazardous substances. Once a site is placed in CERCLIS, it may be subjected to several levels of review and evaluation, and ultimately placed on the National Priorities List (NPL).

NFRAP
SRC#: 18

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for No Further Remedial Action Planned was August, 2000.

The No Further Remedial Action Planned Report (NFRAP), also known as the CERCLIS Archive, contains information pertaining to sites which have been removed from the U.S. EPA's CERCLIS database. NFRAP sites may be sites where, following an initial investigation, either no contamination was found, contamination was removed quickly without need for the site to be placed on the NPL, or the contamination was not serious enough to require federal Superfund action or NPL consideration.

SCL
SRC#: 306

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Potential Hazardous Waste Sites was March, 2000.

This database is provided by the Department of The Environment, Hazardous and Solid Waste Mgmt. Administration. The agency may be contacted at: 410-631-3493. The Maryland Potential Hazardous Waste Sites List contains all of the sites currently identified by the U.S. EPA CERCLIS program. The state agency cautions that the list is not a comprehensive list of all sites or facilities in Maryland which may have activities which generate or use hazardous or toxic substances, chemicals, petroleum products, etc.

RCRIS-TSD
SRC#: 12

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for RCRIS Treatment, Storage and Disposal Facilities was June, 2000.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDs are facilities which treat, store and/or dispose of hazardous waste.

SWLF
SRC#: 23

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for USGS Solid Waste Landfills was December, 1991.

This database is provided by the United States Geological Survey. The agency may be contacted at: 703-648-5613.

SWLF
SRC#: 302

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Recycling Directory was January, 1996.

This database is provided by the Department of The Environment, Hazardous and Solid Waste Mgmt. Administration. The agency may be contacted at: 410-974-7281.

SWLF
SRC#: 308

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Permitted Solid Waste Disposal Facilities was October, 1999.

This database is provided by the Department of The Environment, Hazardous and Solid Waste Mgmt. Administration. The agency may be contacted at: 410-631-3364.

LUST
SRC#: 305

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Active Recovery Sites List was February, 1999.

This database is provided by the Department of The Environment. The agency may be contacted at: 410-631-3443.

C) DATABASES SEARCHED TO 1/4 MILE

UST
SRC#: 303

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for Underground Storage Tanks was July, 2000.

This database is provided by the Department of The Environment, UST Division. The agency may be contacted at: 410-631-3442. Be advised that some states do not require registration of heating oil tanks, especially those used for residential purposes.

D) DATABASES SEARCHED TO 1/8 MILE

ERNS
SRC#: 8

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for Emergency Response Notification System was December, 1999.

ERNS is a national computer database system that is used to store information on the sudden and/or accidental release of hazardous substances, including petroleum, into the environment. The ERNS reporting system contains preliminary information on specific releases, including the spill location, the substance released, and the responsible party.

RCRA-LQG
SRC#: 16

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for RCRIS Large Quantity Generators was June, 2000.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Large Generators are facilities which generate at least 1000 kg./month of non-acutely hazardous waste (or 1 kg./month of acutely hazardous waste).

RCRIS-SQG
SRC#: 15

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for RCRIS Small Quantity Generators was June, 2000.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Small Quantity Generators are facilities which generate less than 1000 kg./month of non-acutely hazardous waste.

SPILLS
SRC#: 307

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for Spills was October, 1999.

This database is provided by the Department of The Environment. The agency may be contacted at: 410-333-2950.

End of Report

APPENDIX C

REGULATORY AGENCY CORRESPONDENCE

Fax Sheet

URS
DAMES & MOORE

7101 Wisconsin Avenue
Suite 700
Bethesda, Maryland 20814
(301) 652-2215 Tel
(301) 656-8059 Fax

TO: FOIA Coordinator COMPANY: MDE FAX NUMBER: 410-631-3321

FROM: Dana Harris

DATE: March 1, 2001

SUBJECT: FOIA

NO OF PAGES: 1

Maryland Department of the Environment
2500 Broenig Highway
Baltimore, Maryland 21224
Via Facsimile (410) 631-3321

Dear Sir or Madam:

Dames & Moore is currently conducting an environmental assessment of:

Former Bock Oil Company site, 102 Key Street, Hagerstown, MD 21740

Under the Freedom of Information Act, I am requesting information concerning environmental violations, contamination incidents or known hazardous waste sites that may have occurred on or near the above sites.

If you need any additional information, please do not hesitate to call me at (301) 652-2215. Your assistance is greatly appreciated.

Sincerely,
DAMES & MOORE

Dana L. Harris
Project Environmental Scientist

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of the message is not the intended recipient, or the employee or agent responsible for delivering the message, you are hereby notified that any dissemination, distribution or copying of the communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us at the above address via the U.S. Postal Service.

MDE

MARYLAND DEPARTMENT OF THE ENVIRONMENT
2500 Broening Highway • Baltimore Maryland 21224
(410) 631- 3000 • 1- 800 -633-6101 • http:// www. mde. state. md. us

Parris N. Glendening
Governor

Jane T. Nishida
Secretary

March 19, 2001

Ms. Dana L. Harris
URS/Dames & Moore
7101 Wisconsin Avenue
Suite 700
Bethesda MD 20814

RE: Tracking Number: 2001-04189
Request Received March 5, 2001

FORMER BOCK OIL COMPANY

Dear Ms. Harris:

The Maryland Department of the Environment (MDE) received your recent request for information under the Public Information Act (PIA).

After conducting a thorough search of our files, the Waste Management Administration has no records responsive to your request. There were no charges incurred as a result of this search.

When requesting information regarding this request, please cite the tracking number referenced above. If you have any questions, please call me at (410) 631-3314.

Sincerely,

Maria Stephens
PIA Liaison
Waste Management Administration

APPENDIX D

EXCERPTS FROM SCHNABEL PHASE II INVESTIGATION

Schnabel Environmental Services
A Division of Schnabel Engineering Associates, Inc.

JAMES J. SCHNABEL, P.E.
RAY E. MARTIN, Ph.D., P.E.
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May 20, 1993

City of Hagerstown
1 East Franklin Street
Hagerstown, Maryland 20740

Attn: Mr. Bruce Johnston
City Engineer

Gentlemen:

This report presents the results of the Phase I and Phase II environmental assessment completed to evaluate the conditions of the former Digby Building and associated property located at 104 Key Street in Hagerstown, Maryland. The results of this report have been reviewed by the City of Hagerstown staff. Comments from the staff have been incorporated into the report.

We appreciate the opportunity to be of service on this project. Please feel free to contact us if you have any questions.

Very truly yours,

SCHNABEL ENVIRONMENTAL SERVICES

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Project Scientist

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1.0 INTRODUCTION

This report has been prepared to present the findings of an Environmental Site Assessment at the former Digby Building located at 104 Key Street, Hagerstown, Maryland. Figure 1 presents a vicinity map of the site. The Digby Building is a former manufacturing facility dating back to the early 1900's. The items manufactured at the site have included silk ribbons, shoes, and furniture. It was the City of Hagerstown's desire to have potential environmental concerns that may be the result of past activities at the site identified and, if appropriate, have corrective action plans prepared to address the recommended remedial activities. This study was initiated to perform an environmental assessment of the property and document its condition and areas potentially requiring remediation. This report includes the review of previous environmental, geological, archaeological, and real estate appraisal reports for the site and surrounding properties, a review of regulatory records for the site and surrounding facilities, and the findings of subsurface exploration, water and soil sampling, laboratory testing, and interior inspection of the existing structure.

2.0 PURPOSE AND SCOPE

The purpose of this assessment was to investigate and document the conditions on the property that could potentially pose an environmental liability to future owners of the property. The scope of services for this study included the following:

- Development of a general site history based upon the provided information and historical information obtained during the investigations.
- A description of the site conditions based upon a site reconnaissance.
- A sampling and testing program, including subsurface exploration by hand augers, and other drilling methods, to assess the presence or absence of subsurface contamination from on-site and/or off-site sources. This sampling and testing program included the installation and sampling of four groundwater monitoring wells.
- An investigation by use of a terrain conductivity survey of general subsurface conditions, including indications or findings concerning the presence of underground storage tanks or buried drums.

- A description of general subsurface conditions as related to the potential migration of hazardous substances.
- Our opinion, based on available data, as to the likelihood of significant concentrations of hazardous material being present on the site.
- Recommended follow-up studies, if necessary, which may be needed to better define the conditions.
- Preparation of this report that documents site conditions, recommends remediation activities, and summarizes findings and conclusions.

3.0 SITE BACKGROUND

3.1 Site Location

The site is located at 104 Key Street, Hagerstown, Maryland and identified as Parcel 1200 on Tax Map 312. The site is located in an historically industrial section of the city on the southwest corner of Key Street and Highland Avenue. Hagerstown City Park abuts the subject property to the north, south and east. City Park Lake is located southeast of the subject property across Park Drive. The Museum of Fine Arts is located to the south and the Jonathan Hager House is located across Key Street to the north. A map indicating on-site improvements and neighboring properties is presented as Figure 2.

3.2 Geologic Setting

According to the Geologic Map of Washington County dated 1978, the property is underlain by rocks of the Stonehedge Limestone and Conococheague Limestone of Ordovician age. Crop outs of limestone were observed on-site and limestone was encountered in the monitoring well drilling (discussed subsequently) that confirms the presence of these materials. The limestones at this site are typically dark gray, thick bedded to massive with occasional thin shaley interbeds. Clay and silt residual soils resulting from the in situ weathering of these rocks are typically present above limestones. Man-placed fill is present above the silts and clays.

Limestones are often subject to development of cavities and solution features in the rock. This is due to dissolution of the calcium carbonate that is the major rock chemical component. No evidence of solution features were noted during the site exploration, however, it is possible that these features may be present below the site. These features could be important if groundwater remediation of the site vicinity is required.

3.3 Historical Review

The earliest information obtained concerning the property was found in an unpublished paper on file in the Western Maryland Room of the Washington County Free Library in Hagerstown. According to this paper, a 200 acre parcel of land that included the subject property was purchased by Jonathan Hager in 1739. Mr. Hager occupied a residence on the property for fourteen years at which time the land was sold to Jacob Roher. William Heyser II acquired the land from the Roher family in 1806. William Heyser died in 1836 and the land was inherited by his two sons, Frederick and John Henry. Upon the death of John Henry Heyser in 1882, the property was sold to William and Alexander Armstrong. Research indicates that the property was used primarily for residential and agricultural purposes up until the time the Armstrongs sold it in 1890. In 1890, Alexander Armstrong II sold the property to the West End Improvement Company which subsequently divided the property into smaller parcels, one of which was the tract of land purchased by the Hagerstown Silk Company and is the subject of this study. A review of deed and land records at the Washington County Courthouse indicated that the property owners since 1904 have been predominately corporations. Table 1 presents a list of the individuals and corporations who have been associated with the property since 1890.

Table 1
History of Property Ownership

OWNER	CONVEYED BY	DATE	LIBER/FOLIO
Novan Manufacturing Inc.	Derri Donovan & Harold N. Taylor	1-11-78	652/719
Derri Donovan	Harold N. Taylor	11-1-77	648/330
Harold N. Taylor	The Taylor Company	6-28-76	617/475
The Taylor Company	The Hagerstown Rubber Company	3-17-69	485/141
The Hagerstown Rubber Company	Maryland Mat Company	9-7-33	194/523
Maryland Mat Company	E. Smead, A. Baker, & J.W. Ernst (trustees in the bankruptcy of Hagerstown Silk Company)	N/A	193/523
Hagerstown Silk Company	William Wingert	12-18-06	125/139
William Wingert	West End Improvement of Hagerstown	10-5-05	124/319
Hagerstown Silk Company	West End Improvement of Hagerstown	8-29-04	120/363
West End Improvement Company	William H. Armstrong, et al	11-16-1890	96/130

The Washington County Historical Society was visited to obtain information on the history of Hagerstown with respect to the industrial district in general and the subject property in particular. A review of a photograph file for Hagerstown's parks indicated that the current Park Circle was known as Mill Stone Circle in the early 1900's. Photographs from this era indicate that the City Park area was surrounded by dense woods. No signs of the industrial buildings in the vicinity were visible in the photographs available for review at the time of this study. A file of newspaper and periodical articles published in 1911 was also reviewed. According to an article in this file, Hagerstown Silk Company was a manufacturer of fine silk ribbon and occupied a five-story building with the dimensions of 50 ft by 212 ft. There were 200 skilled labors employed at the factory at the time of the article. After the Hagerstown Silk Company went bankrupt in

the early 1930's, the property was briefly held by Maryland Mat Company who in turn sold it to Hagerstown Rubber Company. According to a report prepared for the Maryland Historical Trust, Survey No. WA-HAG-167, the property housed both the Hagerstown Rubber Company and Hagerstown Leather Goods during the 1960's. Hagerstown Rubber Company manufactured rubber soles for Hagerstown Shoe Company. Digby Products, a subsidiary of Hagerstown Leather Company, became a tenant of the property in the 1970's. According to Maryland Division of Labor and Industry, Digby Products employed 27 people in 1975 and 28 people in 1977. In 1978, Harold Taylor, president of both Hagerstown Leathers Goods and Digby Products, sold the property to Novan Manufacturing Inc. Novan Manufacturing Inc. made upholstered furniture and employed 17 people in 1979 and 43 people in 1987. Novan vacated the building in 1988.

Sanborn Insurance Maps for the years 1910, 1918, and 1926 were reviewed for this study. According to the 1910 map, the property was occupied by Hagerstown Silk Company. Office space, a stock and shipping room, a machine shop and a general storage room occupied the first floor of the building. Weaving operations occurred on the second and third floors. Warping, winding and quilling took place on the fourth and fifth floors. An elevator was located in the central portion of the building. A detached auto shed was located in the northwest property corner and in the southwest corner were a softener tank and a water tank. The map also indicated that the site was supplied with steam heat, power and electric lights. A double hydrant supplied city water and the main water lines were located along a driveway where the present day Highland Avenue is located. Standard Oil is shown occupying the property currently occupied by Bock Oil. The machine shop on the first floor and the softener and water tanks are not present on the 1918 Sanborn Map. A railroad spur is shown running along the western property line. According to the 1926 map, the water tank is present again. Park Drive and City Park Lake are present to the east of the building. There are been several new above ground storage tanks added to the adjacent Standard Oil facility.

A U.S. Geological Survey Topographic Map, Hagerstown quadrangle for the year 1953 (revised 1985), was also reviewed for this study. According to the map, the area in the vicinity of the site is predominately industrial in nature. City Park with its

associated lake and woodlands is present to the south and east of the site. North and west of the site run railroad tracks for the Baltimore & Ohio, Norfolk & Western, and Conrail systems. The above ground oil tanks associated with Bock Oil to the northwest of the site are present as are the railroad roundhouse and rail yards. The only significant change in the 1985 revision, is the presence of additional commercial structures north and east of the roundhouse.

3.4 Regulatory Review

An environmental profile of the site was prepared by searching AP Environmental Data Company's on-line databases for the zip code area of the study site (20740). The databases available for review were RCRA Registrations/Permits including the Resource Conservation and Recovery Information System (RCRIS) and Hazardous Waste Data Management System (HWDMS), CERCLA including the National Priorities List (NPL) and CERCLIS, the 1987, 1988 and 1989 Toxic Release Inventory (TRI), Facility Index System (FINDS), Civil Enforcement Docket, and Emergency Response Notifications System (ERNS). All of these databases are maintained by the U.S. Environmental Protection Agency. A copy of the report generated during the on-line search is included in Appendix B.

According to the CERCLA database, neither the site nor any adjacent or abutting sites within a one-half mile radius of the subject property were included in the NPL as of March 2, 1993. There were three sites within a one-half mile radius listed in the CERCLIS. The CERCLIS is a database that serves to track sites that have come to EPA's attention as having the potential for releasing hazardous substances into the environment. The first listed site is identified as Central Chemical, located at North Burhans Boulevard, approximately one-half mile northwest of the subject property. Central Chemical's corporate headquarters are located at 49 N. Jonathan Avenue, Hagerstown. This site is described as a chemical company that at one time was involved in the manufacture of pesticides. Some of the material used at this site was placed in a dump adjacent to the plant. At the time of this study, a sampling and testing program is being prepared by the Maryland Department of the Environment to evaluate the soils and

A letter was also submitted to the State of Maryland Department of the Environment, Division of Hazardous and Solid Waste Management to request a search of their files for any information on users or generators of hazardous waste and on any registered underground storage tanks that might effect the site. A letter received from the State, presented in Appendix B, indicated that they had information on file for facilities in the area of the Digby Building. The State's offices were visited on May 6, 1993 to review these records. According to the file for Bock Oil Company, the site is permitted as an oil storage facility. A site inspection report, Report No. 89-OP-0767, indicated that there were no oil saturated soils found at the site during an 1989 inspection. The only information in the Magnus Company file was a real estate record indicating that the facility was acquired by National Lead Company in 1927 and sold in 1936. No information on National Lead Company was available at the time of this report. The CSX Rail Yard was investigated by the State in September 1988 after a diesel fuel spill was reported. According to the investigation report, the materials involved in the spill were not classified as hazardous wastes and no indications that a respiratory hazard existed based on OVA (organic vapor analyzer) measurements. According to the file on the Koppers Company, in 1979 the Environmental Toxicology and Risk Assessment Division recommended remedial actions be taken at the site based on the discovery of creosote in the soils around the facility. An investigation revealed that benzopyrene was present at a concentration of 12 ppm. The affected soils were removed from the site and in September 1980 the site was listed as requiring no additional action.

4.0 SITE INVESTIGATION

4.1 Detailed Site Reconnaissance

4.1.1 Exterior Site Conditions

A site reconnaissance was performed on April 26, 1993 by Schnabel environmental specialists. The site reconnaissance consisted of a visual observation with photographic documentation of the site and accessible abutting and adjacent properties,

At the second location (location 2 on Figure 5), a high conductivity zone was also encountered. This location was under the steel cross-beam overhang across the driveway and steel drain pipe. Hand probes in this area also indicated shallow rock and it appears the high measurements result from these nearby metallic structures.

The third location (location 3 on Figure 5) had moderately high readings adjacent to metal doors into the building. Hand auger probes in this area did not indicate the presence of buried structures.

The fourth location (location 4 on Figure 5) has moderately high readings in the vicinity of the gas meter and buried gas lines which were marked by the gas company.

The fifth location (location 5 on Figure 5) is adjacent to the storm drain in the parking lot. Hand augers in this area do not indicate the presence of other buried structures. As a result, these measurements likely represent the storm drain.

The final location (location 6 on Figure 5) is adjacent to the sump for the loading dock. The sump has a steel manhole cover and concrete interior with live electrical power to the pump. Again, it is our opinion that the high conductivity measurements in this area represent the sump.

Based on the terrain conductivity data collected, there were no locations where anomalous measurements were recorded that could not be explained by existing surface or subsurface features.

4.3 Ground Water Monitoring Wells

Four groundwater monitoring wells were installed at the locations indicated on Figure 6. Boring logs with well construction details are presented in Appendix C. Soil samples were collected during the drilling process. Sampling equipment was decontaminated between sampling event and drilling equipment was decontaminated between borings in accordance with EPA recommended protocols. The auger cuttings generated during the installation of each well were screened on-site with a photoionization detector (PID). The screening was performed as a head-space analysis of soil samples

retained in glass jars sealed with teflon lined lids. No readings above standard background levels were measured for any of the soil samples. Drill cuttings were drummed and left on site to await laboratory chemical test results.

Each well was developed by purging with a decontaminated bailer. The purging consisted of removing a minimum of three well volumes of water from each well in accordance with EPA protocols. Purged water was containerized and left on site to await laboratory chemical test results. Each well was then sampled with a decontaminated teflon bailer. The contract laboratory provided the appropriate sample containers and preservatives for each sample collected. One duplicate sample for each test parameter was collected and submitted to the laboratory for quality control/quality assurance. All samples collected were transported to the laboratory within 24 hours. Copies of the chain of custody documents are presented in Appendix D.

4.4 Subsurface Sampling and Testing Program

To evaluate the general subsurface site conditions, a total of twelve 1.5-inch diameter hand probes were performed around the perimeter of the existing improvement. The locations of the hand probes are shown on Figure 6. The hand probe logs generated for each location are presented in Appendix C. All equipment used in the sampling operation was decontaminated before and after use and between each probe location in accordance with EPA recommended protocols. The soils obtained from each probe were screened on-site with a PID. The screening was performed as a head-space analysis of soil samples retained in glass jars sealed with teflon lined lids. No readings above standard background levels were measured for any of the soil samples. One composite sample from each probe location and one duplicate sample from HA-3 were collected for laboratory testing.

5.0 FINDINGS AND RECOMMENDATIONS

5.1 Geologic and Hydrogeologic Conditions

Logging of the monitoring wells during the drilling process indicated that the limestone is overlain be residual clays, silts, and man placed fill. The soil and fill materials range in depth from less than one-foot to 13 feet in the parking lot areas and was about three feet at the Highland Avenue MW-1 monitoring well location. The depth of soil above rock and the differentiation between fill and natural soils is shown on the monitoring well and probe logs presented in Appendix C. Groundwater elevations measured in the monitoring wells ranged from about 541 to 547 feet or within two to six feet below the building parking lot grade. These groundwater elevations are consistent with the adjacent City Park Lake elevation of about 530.

Figure 6 presents interpreted groundwater flow directions based on water level data collected on May 5, 1993. The groundwater appears to be flowing towards MW-2 in the northeastern parking lot. The water level in this well and apparent groundwater flow could be influenced by the shallow sump pump adjacent to the loading dock used to keep the dock area dewatered. This pump was in operation at the time of the monitoring well water level measurements. It is likely that when this sump is not in operation, the groundwater flow is in a more southeasterly direction towards City Park Lake.

The U.S. Environmental Protection Agency was contacted for information on the radon potential of the soils and rocks in the vicinity of the site. According to their latest published data (April 1992), a total of 824 homes in the zip code area of the site (20740) have been tested for indoor radon. Of these 824 homes, 194 (23%) tested less than 4 pCi/l, 525 (64%) tested between 4 and 20 pCi/l, and 105 (13%) tested greater than 20 pCi/l. The action level for remediation in Maryland is 4 pCi/l.

5.2 Chemical Analysis

Samples of soil and groundwater obtained during the subsurface investigation were submitted to an EPA approved laboratory to be tested for a variety of chemical

parameters. One composite soil sample was taken from each hand auger probe (HA-1 through HA-12) and one water samples was taken from each monitoring well (MW-1 through MW-4). In addition, one soil quality control sample was taken from HA-8 and water quality control samples for selected parameters were taken from each monitoring well.

All of the soil samples, including the quality control sample, were tested for purgeable aromatics and petroleum distillates (BTEX, MBE, Naphthalene, TPH), 33 volatile organics, 65 semi-volatile organics (BNA's), 7 types of PCB (PCB's), 13 priority pollutant metals, total cyanides, and phenolics. Water samples, with the exception of the quality control samples, were tested for purgeable aromatics and petroleum distillates (BTEX, MBE, Naphthalene, TPH), 33 volatile organics, 65 semi-volatile organics (BNA's), 7 types of PCB (PCB's), 13 priority pollutant metals, total cyanides, and phenolics. The quality control water samples were tested for selected parameters from each well to verify consistency of results. In addition, one soil sample was retested using a separate petroleum product test procedure due to the nature of the sample. This was recommended by the chemical test laboratory based on the nature of the sample. The laboratory test results reports for the soil and water chemical testing are presented in Appendix D. The following sections discuss the results of the testing for the soil and water samples.

5.2.1 Soil Chemical Test Results

All soil samples tested below detection limits for purgeable aromatics and petroleum distillates, volatile organics, semi-volatile organics (BNA's), PCB's, and phenols. Cyanides were measured in HA-9 at 12 ppm (12000 ppb). One soil sample that visually indicated petroleum product but did not detect total petroleum hydrocarbons (TPH) using the normal 8015M testing procedure was retested using the alternate 418.1 test procedure. The results of this testing indicated 2.8 ppm which is below regulatory action levels.

A variety of heavy metals were measured in the soils from the priority pollutant metals testing. Concentrations of arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, and zinc were measured above detection limits. Arsenic, cadmium, chromium, lead, and mercury are included on the RCRA EP Toxicity contaminants list. In order to determine if site soils classify as a hazardous waste, EP Toxicity testing will have to be completed. Table 3 presents the soil chemical test results for each sample.

5.2.2 Water Chemical Test Results

All water samples tested below detection limits for BNA's, PCB's, cyanides, and phenolics. MW-1, nearest and immediately downgradient of Bock Oil, indicated the presence of TPH and xylenes. Both of these parameters were below regulatory action limits. Tetrachloroethylene was detected in MW-4. The quality control sample obtained from MW-4 also indicated the presence of tetrachloroethylene as well as chloroform. Chloroform was measured at the detection limit of 1 ppb which is below the 100 ppb action level. Tetrachloroethylene was measured as 3 ppb in the initial water sample and 4 ppb in the quality control water sample. Both these concentrations are below the action level of 5 ppb specified by the State of Maryland and EPA in drinking water standards. Metals were detected in most water samples. The detected metals were generally consistent with those detected in the soil. Antimony, arsenic, chromium, mercury, nickel, selenium, and silver were all less than action levels for drinking water. Concentrations of beryllium (MW-2), cadmium (MW-1, MW-2 and MW-4). and lead (MW-1 and MW-2) exceeded action levels for drinking water. Table 4 presents a summary of the water chemical test results.

TABLE 3
SUMMARY OF LABORATORY TESTING
SOIL SAMPLES

PARAMETERS	ACTION LEVEL	HA 1	HA 2	HA 3	HA 4	HA 5	HA 6	HA 7	HA 8	HA 9	HA 10	HA 11	HA 12	QC Sample
METALS - Antimony	30	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12
Arsenic	80	26.4	12.6	9.8	31.8	3.2	12.4	21	20	15.4	12.8	24	12	22.8
Beryllium	0.02	1.5	1.5	1.3	2.0	<1	1.2	<1	1.1	1.2	<1	<1	<1	2.0
Cadmium	40	<1	<1	2.7	3.0	2.7	1.7	2.2	<1	2.4	2.8	<1	3.3	<1
Chromium	400	21.1	16.8	16.4	30.3	6.7	19.1	26.8	34.4	24.2	9.7	27.8	22.9	38.1
Copper	N/E	17	14.5	13.4	19.2	40	788	19	11	250	42.8	116	22.5	17.8
Lead	N/E	11.4	8.4	12.8	12.8	195	243	89.2	73.2	208	284	206	186	100
Mercury	20	0.15	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	200	36	35	28.3	38.5	20.1	26.2	27	45.5	28.2	22	42.9	27.2	42.7
Selenium	0.01	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Silver	200	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thallium	N/E	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc	N/E	53.6	39	39.5	66.5	172	189	52.6	36.2	121	1010	555	352	50.4
VOA's/TPH/ BTEX	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-VOA's (BNAs)	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB's	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYANIDES	N/E	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND
PHENOLS	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All results reported in parts per million (ppm); 1 ppm equals 1 mg/kg; Action levels are based on maximum contaminant levels of soils as defined in the Federal Register, July 27, 1990; N/A (not applicable); ND (non detect, samples tested less than the detection limits); N/E (not established); QC Sample is a duplicate of HA8.

TABLE 4
SUMMARY OF LABORATORY TESTING
WATER SAMPLES

PARAMETERS	ACTION LEVEL	MW 1	MW 2	MW 3	MW 4	QC SAMPLE	QC SAMPLE WELL
METALS - Antimony	5	<60	<60	<60	<60	<60	MW-2
Arsenic	50	<10	<10	<10	<10	<10	MW-2
Beryllium	1	<5	8.3	<5	<5	<5	MW-2
Cadmium	5	10.5	10	<5	10.3	<5	MW-2
Chromium	100	<10	10.3	<10	<10	<10	MW-2
Copper	1300	<25	124	<25	<25	27.3	MW-2
Lead	15	18	94	6	<3	23	MW-2
Mercury	2	<0.2	0.3	<0.2	<0.2	0.4	MW-2
Nickel	100	<40	96.9	<40	<40	<40	MW-2
Selenium	50	<5	<5	<5	<5	<5	MW-2
Silver	100	<10	<10	<10	<10	<10	MW-2
Thallium	1	<10	<10	<10	<10	<10	MW-2
Zinc	5000	23.2	206	<20	<20	41.2	MW-2
VOA's/TPH/ BTEX	1000 TPH 10 Xylene 5 Tetrachloroethylene 100 Chloroform	460 (TPH) 0.003 (xylene)	ND	ND	3 (tetra-chloro-ethylene)	4 (tetrachloro-ethylene) 1 (chloroform)	MW-4
Semi-VOA's (BNAs)	N/A	ND	ND	ND	ND	ND	MW-2
PCB's	N/A	ND	ND	ND	ND	ND	MW-3
CYANIDES	N/A	ND	ND	ND	ND	ND	MW-1
PHENOLS	N/A	ND	ND	ND	ND	ND	MW-1

All results reported in parts per billion (ppb); 1 ppb equals 1 ug/L;
Action Levels are based on the maximum contaminant levels for drinking water adopted by the State of Maryland in April 1992 and are based on the levels defined by EPA in the Safe Drinking Water Act;
NA - not applicable;
ND - non-detect, samples tested less than the detection limits.

SCHNABEL ENGINEERING ASSOCIATES
CONSULTING GEOTECHNICAL ENGINEERS
TEST BORING LOG

Project: Digby Building
104 Key Street
Hagerstown, Maryland

Contract Number: 932016
Boring Number: MW-1
Sheet: 1 of 1

Boring Contractor: GeoTask, Inc.
Rockville, Maryland

Boring Forman:

Drilling Method: Hollow Stem Auger & Downhole Hammer

Drilling Equipment: Air Rotary

SEA Representative: R. Taruselli

Dates Started: 05/03/93 **Finished:** 05/05/93

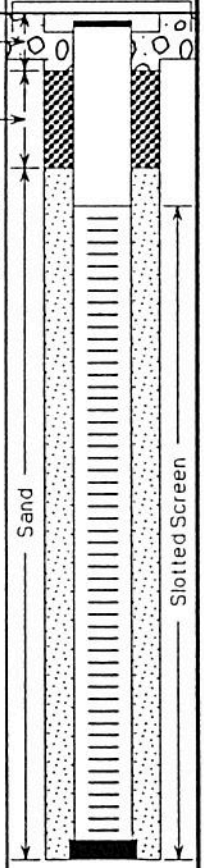
Location:

Ground Surface Elevation: 563.8 ft. ±

Groundwater Observations

	Date	Time	Depth	Casing	Caved
Encountered					
Completion	05/05		7.0		
Casing Pulled					

DEPTH (FT.)	STRATA DESCRIPTION	CLASS.	ELEV. (FT.)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	W (%)	WELL DIAGRAM
	asphalt and crushed stone							
1.0	LEAN CLAY, moist, brown		562.8			1+2+50/1"		
3.0	*Auger Refusal @ 3.0 ft.*		560.8					
	LIMESTONE				5, 10, 15, 20, 25, 30			
22.0	BOTTOM OF BORING @ 22.0 FT.		541.8					



Schnabel Environmental Services
A Division of Schnabel Engineering Associates, Inc.

GROUND WATER SAMPLING RECORD

PROJECT NAME: DIGBY BUILDING
SAMPLED BY: B.A. FLICK
CONTRACT NUMBER: 932106
DATE: 5-5-93
WELL NUMBER: MW-1
TIME: 16:15

STATIC CONDITIONS

(1) Depth to Water, ft	16.9
(2) Depth of Well, ft	22.0
(3) Height of Water, ft	5.1
(4) Radius of Well Casing, in	2.0
(5) Gallons of Water in Well [pi x (4^2) x ((3)/19.296))]	3.3

METHOD OF MEASUREMENT	
TOC - Top of Casing	
TOW- Top of Well	
GS - Ground Surface	X

PURGING DATA

(6) Radius of Bailer, in	1.5
(7) Length of Bailer, ft	4
(8) Volume of Bailer (gal) [pi x (6^2) x ((7)/19.296)]	1.5
(9) Number of Well Volumes to Purge	3-5
(10) Number of Bails Required [((5)/(8))x(9)]	7-11

Number of Bails Performed	7
Gallons Bailed	10.5
Bailed Dry (Y/N)	N
Turbidity (1clear-5very cloudy)	3

BAILER TYPE: PVC

DECON METHOD: clean water wash followed by detergent wash, clean water rinse, distilled water rinse

SAMPLING DATA

SAMPLER TYPE: Teflon

NUMBER OF CONTAINERS: 6

DECON METHOD: same as bailer decon

SAMPLING ORDER: VOAs/TPH, metals, phenols, cyanides, BNAs, PCBs

Trip Blank	
Field Blank	
Duplicate	cyanides & phenols
Replicate	
Spilt Samples	
Filtered Sample	

FIELD TESTS

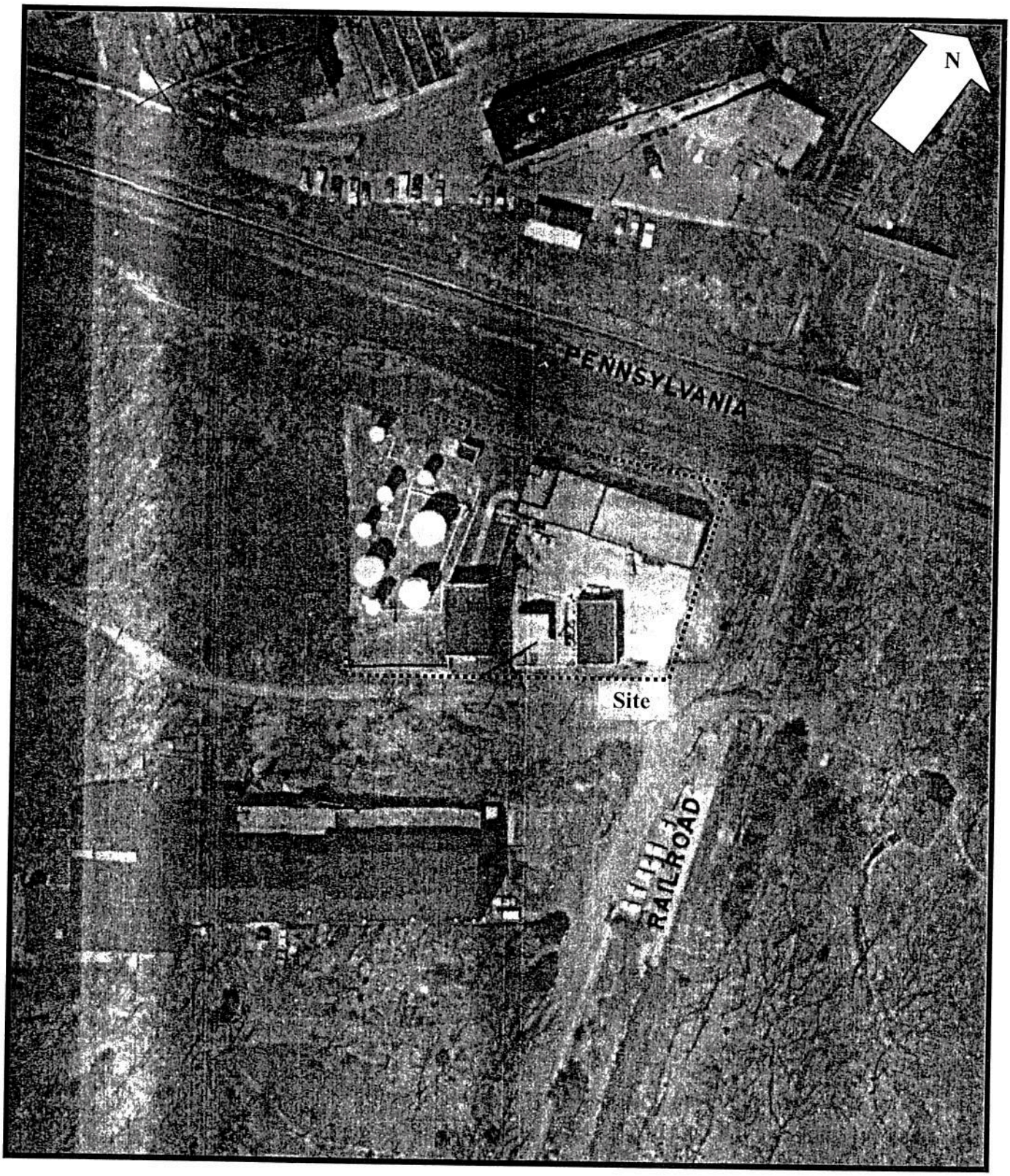
Water Temp.	N/R
Field pH	N/R
Conductivity	N/R

APPENDIX E

AERIAL PHOTOGRAPHS

1997 Aerial Photograph **Scale: 1" = 100'** **Source: City of Hagerstown**

URS
DAMES & MOORE



1982 Aerial Photograph Scale: 1" = 100' Source: City of Hagerstown

URS
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1952 Aerial Photograph **Scale: unknown** **Source: Air Photographics**

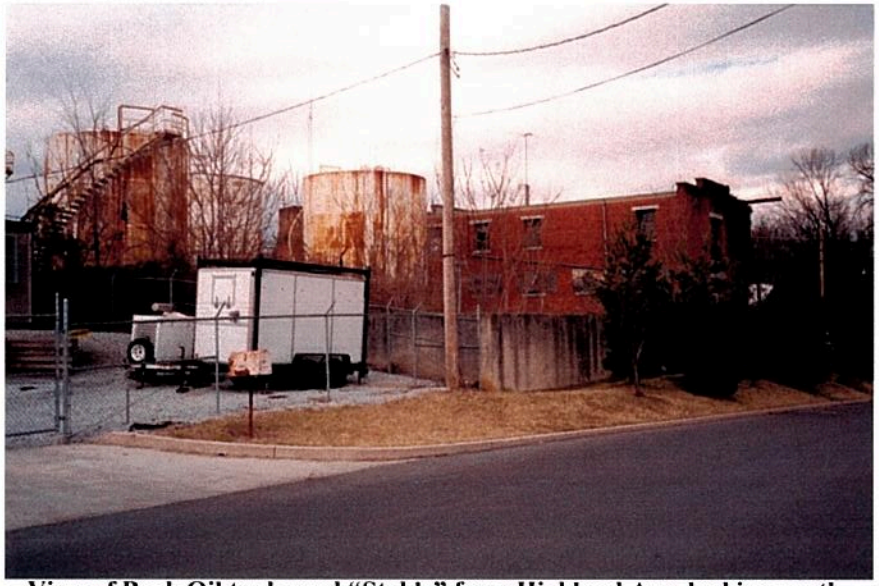
URS
DAMES & MOORE

1938 Aerial Photograph **Scale: unknown** **Source: National Archives**

URS
DAMES & MOORE

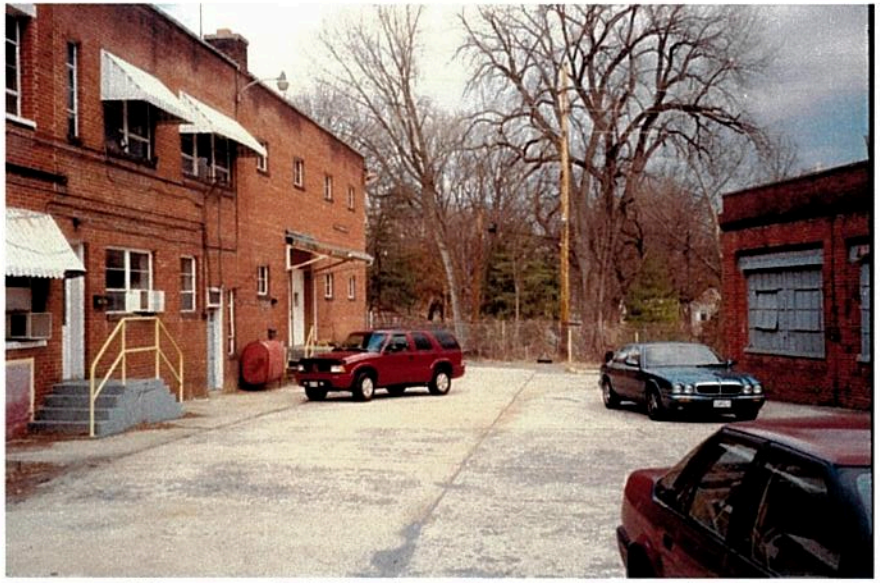
APPENDIX F

SITE PHOTOGRAPHS

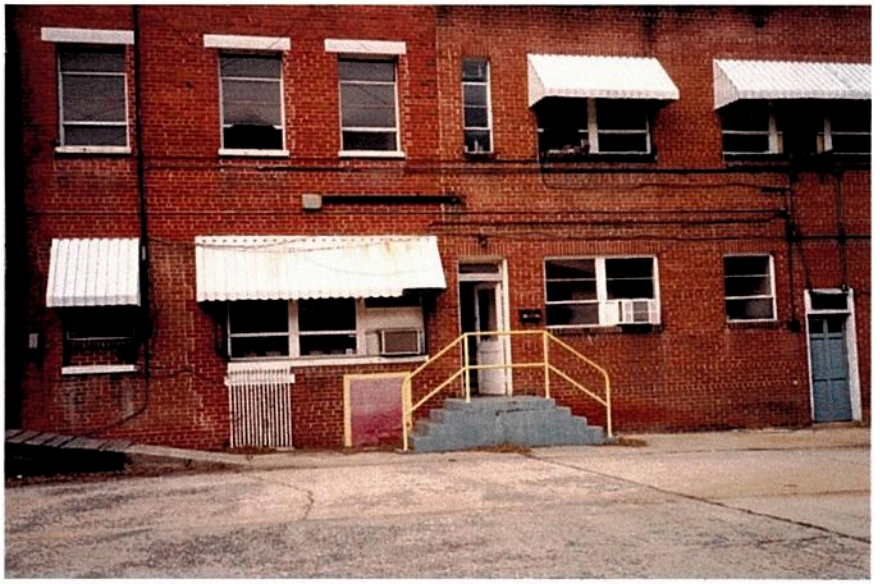


View of Bock Oil tanks and "Stable" from Highland Ave. looking north

View of Garage from northeast portion of site looking southwest



View to north of Warehouse (left) and Garage (right)



View of Warehouse looking northwest

URS

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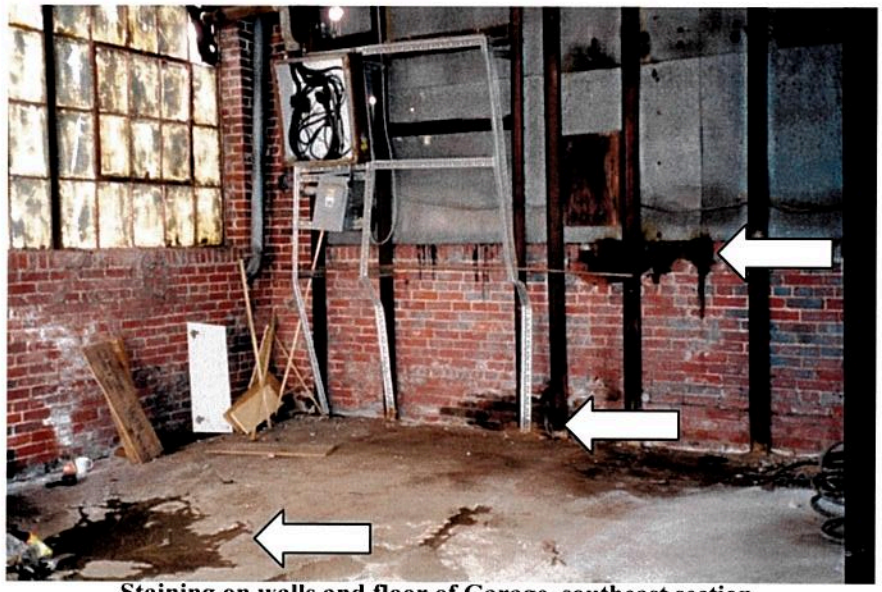
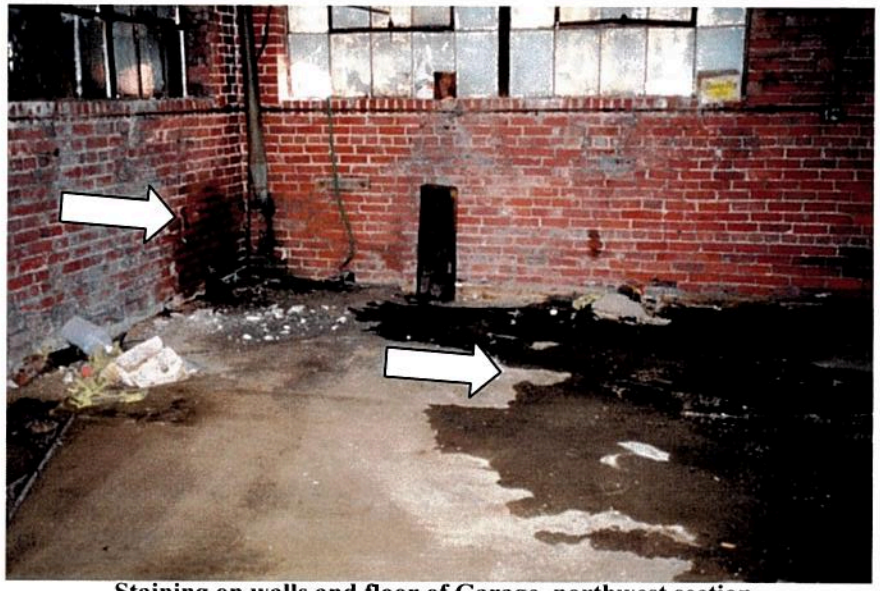


Staining on walls and floor of Garage, southeast section



Staining on walls and floor of Garage, northwest section

Drums within Warehouse building

Storage area inside Warehouse building

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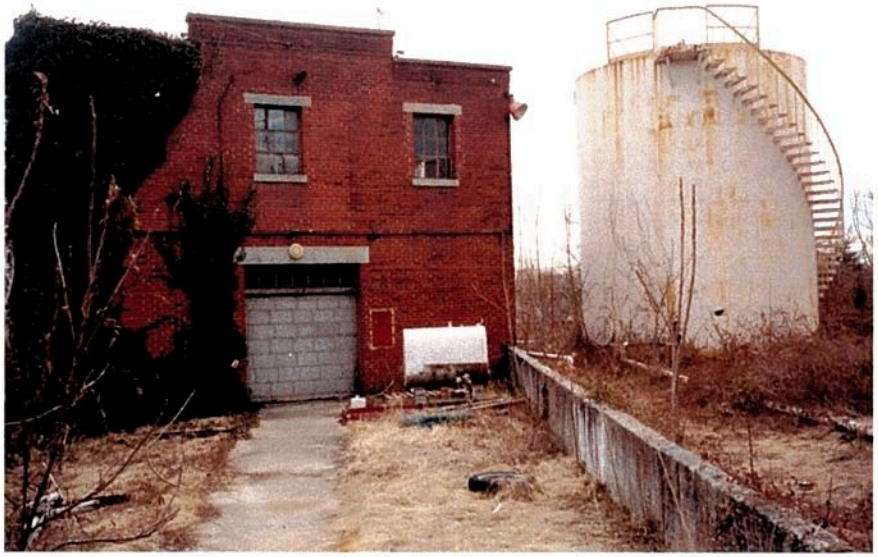
View of tank farm from parking and loading area looking southwest

Stable and tank farm from Warehouse loading area looking south



Stable and 275-gallon AST with 60,000-gallon fuel oil AST (formerly gasoline) AST on right, view to east toward Highland Ave./city park

Aboveground portion of piping within tank farm area

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View from northwest section of tank farm to northeast of Pump House

Remnants of Pump base

Loading racks at Warehouse

Pumps within main loading/offloading area

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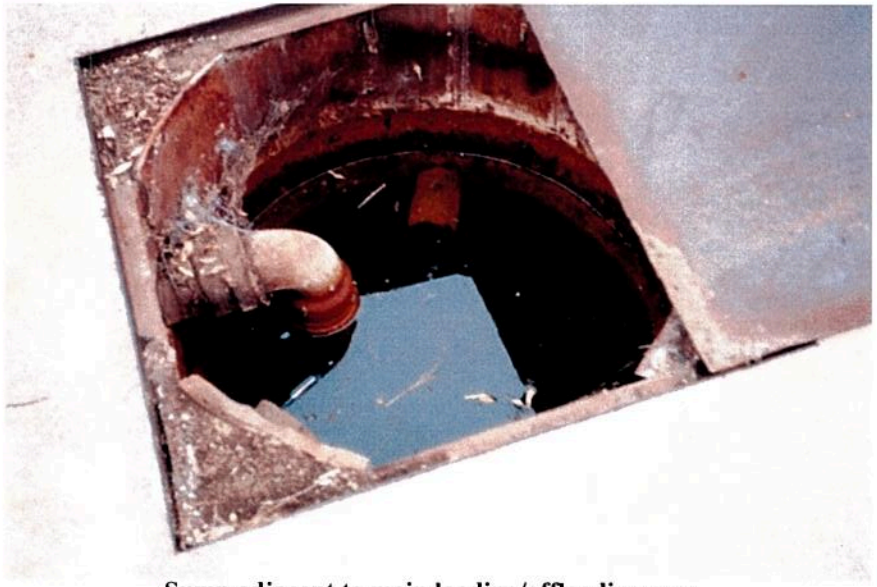
Loading racks under canopy



Sump adjacent to main loading/offloading area

Approximately 1,000-gallon AST in central section of site

275-gallon AST on north end of Warehouse

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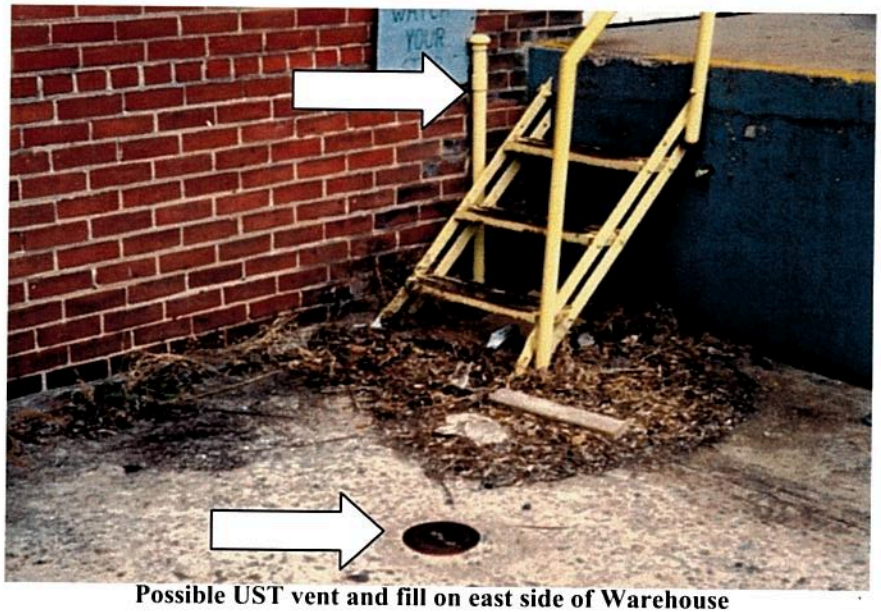
275-gallon AST on east side of Warehouse



Possible UST vent and fill on east side of Warehouse

Opening in concrete at possible sump location on north side of site

Stained gravel on north side of site

URS
DAMES & MOORE

View of tank farm from west end of site looking east

URS
DAMES & MOORE

APPENDIX G

CURRICULA VITAE FOR DAMES & MOORE PERSONNEL

APPENDIX G

CURRICULA VITAE FOR DAMES & MOORE PERSONNEL

CURRICULUM VITAE

MICHAEL J. WOLF

Title Associate

Expertise Environmental Impairment Liability Assessments
Environmental Due Diligence
Regulatory Compliance

Academic Background B.S., Earth Sciences, Pennsylvania State University, 1982

Registrations Registered Environmental Assessor - California, No. 05724

Experience Mr. Wolf has 15 years of professional experience as an environmental consultant and regulator. Mr. Wolf has extensive experience conducting and managing environmental due diligence projects such as Phase I and II environmental site assessments, environmental impairment liability assessments and cost cap reviews in support of the insurance industry, multi-media regulatory compliance audits, and other environmental studies. His responsibilities typically include organization of investigation teams, design of sampling plans, management of field activities, data interpretation, and report review and preparation. Representative project experience includes:

- Management of Environmental Impairment Liability Assessments for industrial facilities insured or being considered for environmental insurance. Assessments are conducted on behalf of underwriters for purposes of setting premiums, writing exclusions and limitations in coverage, etc. Facilities are assessed to evaluate process operations, permit compliance, hazardous waste management, wastewater discharges, air emissions, environmental management, risk management, etc. Since January 1998, EILS have been conducted at over 200 industrial facilities throughout the U.S. and in Canada, Europe, and the Middle East.

- Management of environmental data reviews for property portfolios whose owners have applied for environment liability insurance. Projects completed to date have included: a 400+ property portfolio consisting of office buildings, shopping malls, and apartment complexes (properties located nationwide); a 175 property portfolio (commercial properties located in Toronto); a 60 property portfolio (commercial properties located in California); a 200+ property portfolio (shopping malls, strip centers, and office properties located nationwide); and 200+ property portfolio of apartment complexes (properties located nationwide).

- Management of Cost Cap Evaluations for facilities insured or considered for environmental "stop gap" or "cost cap" insurance. Since January 1998, approximately 25 Cost Cap Evaluations have been conducted, including the following portfolios: 42 electric generating plants and associated fuel depots located in New York; 30-site portfolio (including NPL sites) located throughout the U.S.; 60-site portfolio of explosives manufacturing plants located throughout U.S., Canada, and Europe; 21 operating Battery Mfg. and Recycling Facilities and over 100 active PRP sites located throughout the US; and 40 specialty chemical manufacturing plants located in Europe, Asia, Africa, and the US

X Management of numerous Phase I and II Environmental Assessments at commercial, residential, industrial, and undeveloped properties undergoing transfer, foreclosure, or refinancing. Activities include proposal preparation, organization of inspection teams, regulatory agency notifications, selection of subcontractors and development of subcontracts, design of sampling plans, management of field activities, data interpretation, and report review and preparation. Representative projects managed include:

- Ongoing Phase I and II Assessments of properties being acquired by or donated to American Red Cross. Properties typically consist of commercial buildings in older urban areas. Phase I scope of work includes asbestos, lead paint, and radon surveys. Since July 1998, under national contract, approximately 110 properties in 35 states have been assessed.

- Phase I Assessments of 15-site and 22-site portfolios consisting of apartment communities in five Midwestern states. Scope of work included asbestos, radon, lead-paint, and lead-in-water sampling. Phase II Assessments (soil and groundwater sampling) were conducted at 5 of the properties. Electromagnetic Frequency surveys were conducted at 2 properties to evaluate impacts from nearby power lines.

- Phase I Assessment of three high rise apartment buildings in downtown Boston and two high rise apartment buildings in Stamford, CT. Scope of work included asbestos, radon, lead-paint, and lead-in-water sampling. Over 400 asbestos samples were collected and analyzed on a rush basis for the Boston site.

- Phase I Assessments of nine full service hotels in four states, Puerto Rico, and St. Thomas, VI. Evaluation of compliance with UST and hazardous material/hazardous waste regulations was included in the assessments. Asbestos surveys were conducted at properties constructed before 1980 and tightness testing was performed on all USTs.

- Phase I and II Assessments of twelve hotels in six states. The hotels were all constructed in the 1960s and 1970s and most had out-of-service USTs. In addition, gasoline stations dating from the 1960s and 1970s were located immediately adjacent to many of the hotels. Phase II investigations were conducted at seven of the properties to evaluate potential impacts from onsite USTs and offsite concerns. In some instances, follow-up asbestos sampling was conducted to refine abatement cost estimates.

- Expedited Phase I Assessment and screening type surveys for lead paint and asbestos at an abandoned reform school in Maryland. The property consisted of a 130-acre parcel of land with 22 vacant buildings, most in seriously deteriorated condition. Following the ESA, budgetary planning cost estimates were developed for the environmental cleanup, demolition, and debris removal at the property. Subsequently, conducted monitoring and oversight of asbestos abatement, UST removal, hazardous material removal, and building demolition.

X Manager of due diligence for divestiture of Bestfoods Baking Company portfolio by Unilever U.S. Phase I Assessments and Environmental Compliance Evaluations were conducted at 19 U.S. bakeries and a large R&D Facility. Desktop reviews of environmental information for numerous distribution depots were also conducted and liability costs estimates were developed.

X Manager of due diligence for divestiture of Gorton's Fish by Unilever U.S. Phase I Assessments and Environmental Compliance Evaluations were conducted at four properties in the U.S., including a plant which had been operating since the late 1800s.

X Management of comprehensive lead-based paint and asbestos surveys of two Maryland apartment complexes in accordance with HUD and lender requirements. The complexes were constructed in the late 1940s/early 1950s. Dames & Moore conducted lead paint sampling using XRF equipment following both HUD multi-family and single-family sampling protocols, depending on the building components being sampled. The asbestos surveys included the collection of over 200 asbestos samples at each complex. Dames & Moore prepared abatement specifications and provided abatement monitoring services during the total renovation of the properties.

X Conduct of due diligence project of 23 US and 18 international facilities engaged in laboratory animal breeding and biomedical products and services. Activities included inspection of largest facility, records and permit review, database review, and report preparation.

X Assisted in conducting Environmental Management and Compliance Audit of controlled waste operations at a state University and writing comprehensive audit report. The objective of the work was to evaluate the environmental compliance status of the university relative to existing and planned Federal and State Controlled Hazardous Substance regulations and requirements; and to assess management systems for maintaining compliance with all applicable hazardous waste regulations. Dames & Moore audited 20 waste-generating departments, five waste storage and treatment areas, and a bulk oil tank storage area, and interviewed personnel responsible for each area's operations. Dames & Moore's management system review focused on university policies, procedures, staffing, record keeping, and management support that facilitate compliance with the State=s controlled waste regulations.

X Evaluation of claims submitted to Resolution Trust Corporation (RTC) and Federal Deposit Insurance Corporation (FDIC) requesting repurchase of assets due to alleged Adisqualifying conditions≅. Claims were evaluated for appropriate documentation based on a technical review of Phase I and II environmental assessments prepared by a variety of consultants. Also assisted in project management and internal review of claims evaluated by other staff.

X Management of multi-phased groundwater investigation and litigation support effort for lawsuit involving tetrachloroethene (PCE) contamination of undeveloped property by offsite dry cleaning research facility in Montgomery County, Maryland. Specific activities included development of multimedia sampling efforts; data interpretation and report preparation; organization and management of expert witness team; development of preliminary designs and cost estimates for site remediation alternatives; evaluation of data generated by the research facility's consultant; providing expert testimony in regard to project overview, regulatory consistency, and investigation costs; and research activities as requested by attorneys. Case was decided in favor of Dames & Moore's client.

X Environmental Compliance Audit and Phase I Assessment of poultry feed additive manufacturer in Miley, SC. Activities included site inspection, records and permit review, regulatory research, and report preparation.

X Assisted project manager with due diligence for multi-national acquisition of Diversey, Inc., by Unilever U.S. Project included rapid mobilization and completion of Phase I Assessments, Environmental Compliance Audits and Phase II Investigations of over 30 different facilities in 25 countries. Provided technical review of reports and interacted with the Client and legal counsel.

X Environmental Compliance Audit of metal furniture manufacturing facility in Sarasota, FL on behalf of prospective purchaser. Activities included site inspection, records and permit review, regulatory research, and report preparation.

X Management of 4-day Environmental Management Training Course for FDIC and 2-day training course for Kemper Environmental. Responsible for coordination of training teams, development of comprehensive reference manual, and production of slides and overheads. Topics included Phase I/II/III Environmental Assessments, basic environmental science, emergency response procedures, remediation and abatement, and contractor selection. Also managed and conducted series of 1-day training seminars at FDIC regional service centers, as well as shortened version of initial 4-day course.

X Management and conduct of numerous underground storage tank (UST) removal projects.

Activities include development of bid specification packages, selection of subcontractors, oversight of removal activities, and submittal of required documents to regulatory agencies. Follow up activities where UST releases have occurred include development of multi-media investigation work plans, management of field activities, data interpretation and report preparation, and meetings with regulatory agencies.

X Litigation support for lawsuit between State regulatory agency and owner of gasoline station in Baltimore, Maryland. Dames & Moore was retained by property owner's insurance company to determine whether the scope of activities carried out by the State's contractor were reasonable, and whether the incurred costs were reasonable. Reviewed extensive documentation, including 4 years of remediation reports and contractor invoices, in a short time. Provided technical opinions in letters and during deposition. Case was settled in favor of property owner.

X Environmental compliance audits of three window parts manufacturing facilities in southern North Carolina, on behalf of firm's legal counsel. Activities included site inspection, records and permit review, and report preparation.

X Management of groundwater remediation project resulting from UST petroleum release. Project management activities included UST removal oversight; soil gas survey, and soil, surface water, and groundwater investigations; preparation of investigation reports and corrective action plan for submittal to state; and implementation of remediation system involving air stripping.

X Environmental compliance audit of photovoltaic cell research and development facility in eastern Pennsylvania, on behalf of investment firm seeking joint venture agreement with facility. Activities included site inspection, records and permit review, and report preparation.

X Environmental assessment and compliance audit of kitchen appliance manufacturing facility in central Pennsylvania, on behalf of British firm seeking to acquire company. Activities included site inspection, records and permit review, and report preparation. Significant historic concerns were identified, including contamination of public water supply wells.

X Management of three-person team conducting environmental and health and safety assessment and compliance audit of 100-year old brewery in western Pennsylvania, on behalf of Mexican firm seeking joint partnership. Activities included site inspection, records and permit review, and report preparation.

X Environmental assessment and compliance audit of automotive catalyst production facility in western Kentucky, on behalf of Japanese firm seeking production agreement with facility. Activities included site inspection, records and permit review, and report preparation. Facility was located in heavily industrialized area with numerous potential offsite concerns.

X Environmental due diligence of deep salt mine and salt evaporation plant in Goderich, Ontario, and salt distribution facility in Montreal, Quebec, for bank. Interviewed site personnel, inspected facilities, and reviewed pertinent documents to identify significant environmental liabilities associated with Provincial and Canadian regulations, and to estimate the potential 5-year costs for each identified issue.

X Environmental Compliance Audit and Phase II Assessment of printing facility in Easton, Maryland. Managed audit team evaluating compliance under State and Federal regulations. Designed Phase II multimedia sampling plan to evaluate extent of contamination. Developed cost estimate for remediation and designed quarterly groundwater monitoring plan.

X Remedial cost data collection and data evaluation for $375 million acquisition of approximately 2,500 gasoline stations. Activities included development of remedial cost questionnaire, management of data collection efforts, and evaluation/presentation of data for inclusion in due

diligence report.

X Environmental Remediation Cost Validation for property transaction involving 66 gasoline stations and six bulk petroleum terminals. Activities included review of Phase II reports for adequacy; review of remedial cost estimates for adequacy and reasonableness; and research into cost recovery potentials from various states.

X Environmental investigation and oversight of $300,000 remediation of zinc-contaminated soil at industrial property in Warrenton, Virginia. Activities included preparation of bid package, review of contractor bids, oversight and coordination of remediation, and final report preparation.

X Comprehensive evaluation of a treatment, storage, and disposal (TSD) facility in South Carolina for Waste Site Inspection Group, a consortium of large hazardous waste generators. Activities included site inspection, records and permit review, regulatory agency research, quantitative modeling, and report preparation.

X Management of an Environmental Due Diligence Study for a proposed cogeneration plant at a large chemical manufacturing facility in Deepwater, New Jersey. Activities included document and permit application review, evaluation and analysis of prior studies, development of environmental sampling plan, and report preparation.

X Development of sampling design plans for environmental investigation/alternative analysis at Defense Mapping Agency in Herndon, Virginia; Former Nike site at Aberdeen Proving Ground, Maryland; and Nike Battery KC-30 in Pleasant Hill, Missouri.

X Development of verification investigation and Resource Conservation and Recovery Act (RCRA) facility investigation work plans for Radford Army Ammunition Plant, Virginia. Activities included site visits, review of past environmental investigations, and design of sampling plans for 42 sites.

X Oversight of decontamination and sampling, and preparation of certificate of closure, for a former polychlorinated biphenyl storage facility at a U.S. Navy facility in Maryland.

X Participation in remedial investigation/feasibility study (RI/FS) field activities at National Priority List sites in Arkansas, South Carolina, and Vermont. Duties included purchasing equipment; site mobilization; soil, sediment, surface water, and groundwater sampling; monitoring well installation; sample documentation; and site health and safety.

X Direction of an 8-hour hazardous material/hazardous waste training course for Federal Aviation Administration Technical Center employees. Also developed the training plan and materials.

X Provision of technical support for U.S. Army, Navy, and Air Force Installation Restoration Programs. Reviewed preliminary assessments/site investigations (PA/SI), RI/FS, and supporting documents to obtain data on installations, hazardous waste sites, and projected site cleanup costs. Prepared summaries of environmental issues and cleanup status.

X Preparation of a decision document for a sanitary sewer system interim response action for contamination cleanup at the U.S. Army Rocky Mountain Arsenal.

X Inspection of hazardous waste generators and TSD facilities to determine compliance with RCRA and State regulations.

X Investigation of potential Superfund sites, which included fieldwork, records searches, and personal interviews. Also prepared PA/SI reports and hazard ranking system documentation.

X Investigation of public allegations of improper solid and hazardous waste management practices.

X Provision of technical assistance and public information to the regulated community. Developed and conducted RCRA training for new employees and outside agency personnel.

Professional History

Associate, Dames & Moore, Washington, D.C., 1997-present
Senior Environmental Scientist, Dames & Moore, Washington, D.C., 1990-1997
Environmental Scientist, PEER Consultants, Rockville, Maryland, 1988-1990
Environmental Specialist, Missouri Department of Natural Resources Waste Management Program, St. Louis, Missouri, 1986-1988
Cartographer, Defense Mapping Agency Aerospace Center, St. Louis, Missouri, 1983-1986

Citizenship

United States

Certifications and Training

Advanced Environmental Auditing Workshop, Government Institutes
UST Installation and Closure
OSHA 40-Hour Health and Safety Training and Annual Refresher Courses
OSHA 8-Hour Hazardous Waste Site Supervisory Training
Siting of Hazardous Waste Management Facilities, Air and Waste Management Association
Environmental Risk Assessment, U.S. Environmental Protection Agency
Basic Hazard Ranking System Training, U.S. Environmental Protection Agency

Professional Affiliations

American Society for Testing and Materials (ASTM), Environmental Assessment Standards Committee – participated in development of Phase II Standard and revisions to Phase I and Transaction Screen Standards

AREAS OF EXPERTISE

- Hazardous Waste Investigations
- Hydrogeology

EDUCATION

M.S., Geology, University of South Carolina, 1987

B.A., Geology, Colgate University, 1985

REGISTRATION

Registered Professional Geologist, Illinois (196-000814), 1998

Registered Professional Geologist, Pennsylvania (PG-001742-G), 1995

Registered Professional Geologist, Kentucky (981),1993

Registered Geologist, Tennessee (TN0739), 1988

PROFESSIONAL HISTORY

Associate/Senior Hydrogeologist, URS-Dames & Moore, Washington, D.C., 1999-Present

Associate/Senior Hydrogeologist, Dames & Moore, Washington, D.C., 1987-1999

Drilling Project Supervisor, University of South Carolina, 1986

Research Assistant, Department of Geology, University of South Carolina, 1986

REPRESENTATIVE EXPERIENCE

Mr. McClelland serves as project manager and senior hydrogeologist for remedial investigation and feasibility studies, Brownfields redevelopment projects, Resource Conservation and Recovery Act (RCRA) facility investigations, RCRA closure activities, groundwater contamination projects, and groundwater resource evaluations. He provides hydrogeologic services to private industry and Federal government agencies. In addition, Mr. McClelland has provided expert testimony for litigation support. Representative project experience includes:

- Project Manager and Technical Lead on a Maryland Voluntary Cleanup Program (VCP) at a former wood preserving site located in Baltimore, Maryland. Directed site investigation activities and report writing to support the preparation of a VCP application to comply with conditions of the sale of the property.
- Principal in Charge of a U.S. Environmental Protection Agency (EPA) Pilot Brownfields Project for the City of Hagerstown, Maryland. Project includes development of a Graphic Informational System (GIS) in ArcInfo to provide an inventory of vacant and underutilized properties with potential environmental liabilities. Following development of the inventory, stakeholder meetings were used to select optimum pilot sites for further investigation. The investigations were used to provide cost estimates for clean up. Program is being coordinated with the Maryland Department of Environment (MDE) Voluntary Cleanup Program (VCP) to assist property owners in obtaining No Further Requirements Documentation from MDE to enable the redevelopment and/or sale of the properties.
- Project Manager of a site investigation to identify the extent of a groundwater plume at Valley Forge General Hospital, Pennsylvania under contract to the Baltimore District Corps of Engineers. Coordinated and directed the installation and sampling of temporary wells on private residential properties and the reporting of the findings to guide subsequent investigations being conducted under the Commonwealth of Pennsylvania Act 2 requirements.
- Program Manager of 5-year, $25M Hazardous, Toxic, and Radioactive Waste (HTRW) firm fixed price and cost-reimbursable indefinite delivery type contract with the Baltimore District Corps of Engineers. Delivery

AFFILIATIONS

Association of Groundwater Scientists and Engineers

Society of American Military Engineers

orders under this contract have included air quality services, including air emission inventories, Title V permit support, and compliance documentation; design and development of free product recovery systems, closure of groundwater pump and treatment systems, and scoping and planning activities for an RI/FS under the Formerly Utilized Sites Remedial Action Program (FUSRAP).

- Program Manager of a 3-year, $3M Geotechnical and Environmental Site Investigation Contract with the Baltimore District Corps of Engineers. Delivery orders under this contract have included support of a landfill closure at a Formerly Utilized Defense Site (FUDS) in Pennsylvania, multiple groundwater contamination investigations at Ft. Meade, Maryland; the Former Valley Forge General Hospital, Pennsylvania; and McGuire Air Force Base, New Jersey. Other projects have included design and implementation of pumping tests at a Department of Interior Training Center in West Virginia and Fort Meade, Maryland, as well as the preparation of NEPA compliance documents at C.E. Kelly Support Facility, Pennsylvania.
- Technical support for the assessment of potential environmental liabilities related to the planned development of an intermodal rail facility and a power plant at the Joliet Army Ammunition Plant located in Illinois. Provided detailed information to perspective purchasers/leasees pertaining to the operational history of the facility and the potential environmental concerns that need to be considered in moving forward with redevelopment of the site.
- Project Manager of the remedial investigation/feasibility studies (RI/FSs) for 53 study sites on both the Manufacturing (MFG) and Load-Assemble-Package (LAP) Areas of the Joliet Army Ammunition Plant, Illinois under contract to USAEC and the Louisville District Corps of Engineers. Studies at this Superfund site have included the installation of more than 200 monitoring wells, the collection and analysis of more than 3,000 analytical samples, contamination assessments, treatability studies, risk assessments, negotiation of cleanup levels, evaluation of potential remedial alternatives in a feasibility study, performing treatability studies to assess innovative technologies for the biological treatment of explosives contaminated soils, and

preparation of Proposed Plans and Records of Decision (ROD) for the plant. Mr. McClelland's involvement in this project initiated in 1988 and continued through 1999 with the signing of the ROD and preparation of remedial action plans.

- Project Manager of a Site Suitability Assessment and Hydrogeological Investigation of a proposed municipal landfill for Will County, Illinois. These projects included assessing the suitability of the proposed site with respect to the State of Illinois Landfill Location Standards and the County's Solid Waste Management Plan. Hydrogeological investigations, including regional and site-specific hydrogeological analyses, installation and sampling of monitoring wells, potential contaminant migration pathway analyses, and baseline monitoring were performed to fulfill the regulatory requirements of the landfill permit application.
- Litigation support over a period of 2 years for a case of groundwater contamination in Maryland. Activities included examining and analyzing field data and consultant reports, advising attorneys on technical issues, being deposed, designing and constructing jury exhibits, and providing 1 day of trial testimony. A principal object of the testimony was to educate the jury about groundwater hydrology, particularly as it affects contaminant movement.
- Project Manager of the Phase II and Phase III site investigations at the Covered Storage Facility at Fort Meade, Maryland under contract to the Baltimore District Corps of Engineers. These investigations have involved the use of innovative multi-port well construction techniques and innovative use of a direct-push BAT sampler to delineate the nature and extent of a groundwater plume that has migrated onto the Patuxent Research Refuge (formerly part of Fort Meade). Field activities included unexploded ordnance clearance in former range areas, coordinating activities with active range firing, and coordinating with U.S. Fish and Wildlife personnel to obtain approval for road clearing operations in forested areas of the refuge.
- Project Manager of two simultaneous rapid response task orders under contract to the Baltimore District Corps of Engineers. The first project involved a rapid response sampling effort at a ash landfill located at the Former

Valley Forge General Hospital site in Pennsylvania. The second project included installing a production pump and testing a 750-foot deep production well at the Department of Interior's (DOI) Educational Training Center in Shepardstown, West Virginia. The Valley Forge project required rapid response to collect data to prevent a delay in the planned landfill cap construction. Both projects were preformed over the Christmas/New Year holiday to collect the data as rapidly as possible, and to take advantage of the fact that DOI's other production wells were shut down over the holiday.

- Project Manager of the RI/FS at the "Aberdeen Other Areas" sites, located in Aberdeen Proving Ground, Maryland under contract to HAZWRAP. Site activities range from the use of direct push groundwater sampling, to the conduct of off-shore geophysical surveys in active range areas to locate an area where a barge containing white phosphorous was reportedly sunk, and even determining the extent of UXO resulting from the explosion of a train containing German munitions during WWII. Most of the sites being investigated are located within restricted areas, and require close coordination with range personnel and extensive UXO clearance and characterization.
- Program Manager of Dames & Moore's Environmental Program Support Services (ESPS) contract with USAEC and the Tooele Army Depot, Utah. Task orders under this contract have totaled over $7.0 million. Task orders have been conducted at Tooele and Deseret Chemical Depot, and have included site investigations; preparation of RCRA Corrective Measures Studies; Decision Documents; Feasibility Studies; Records of Decision; negotiation of clean up levels with EPA and Utah regulators. Another task included developing code for the Groundwater Modeling System (GMS) using RT3D to support natural attenuation strategies for explosives in groundwater. A treatability study for composting explosives contaminated soils was also performed under this contract.
- Project Manager of a RCRA Facility Investigation (RFI) and Corrective Measures Study (CMS) performed for a hazardous waste treatment and disposal facility in South Carolina. The RFI characterized the nature and extent of contamination in the soils and groundwater at the facility; performed a risk assessment to evaluate potential impacts

to human health and the environment. The CMS evaluated various corrective measures alternatives and identified a recommended alternative. Subsequent design work included installing deep test wells and performing long-term pumping tests to optimize the placement of recovery wells.

- Senior hydrogeological supervision of a remedial design and remedial action involving the evaluation and design of horizontal wells and an interceptor trench at the Brandywine Defense Reutilization Marketing Office (DRMO) in Maryland for Hazardous Waste Remedial Actions Program (HAZWRAP). The project involved preparing an Engineering Economic Cost Analysis (EE/CA) of the remedial action, collection and analysis of data to support the design of the system, and hydrogeologic design of the interceptor trench.
- Development and management of quarterly groundwater monitoring programs at Detroit Arsenal, Michigan, and the Phoenix Military Reservation, Maryland. Programs to monitor groundwater quality were generated, received regulatory approval, and were implemented.
- Preparation of RCRA Closure and Post-Closure Plans for a hazardous waste treatment and disposal facility in South Carolina. Plans detailed the activities necessary to comply with regulatory requirements for closure, as well as activities necessary should clean closure not be feasible.
- Management and technical supervision of an RFI at a solvent recycling center in Florida. An RFI Workplan was generated detailing the activities to be conducted to evaluate the source of a release of organic constituents into the groundwater.
- Management and technical supervision of a remedial design plan for Whitlock Combing, Inc., in South Carolina. Work involved the pre-design plan detailing the disposal of waste materials and capping of a landfill followed by the installation and operation of a pump and treatment system to remediate affected groundwater.
- Preparation of a RCRA Facility Assessment report for an industrial site in Charleston, South Carolina. Assessment included records searches, onsite surveys, soil sampling, evaluation of information, and development of recommendations for further work.

- Preparation and implementation of RFI work plans for two industrial sites in South Carolina. Studies included site visits, review of past investigations, incorporation of existing analytical data into RFI work plans, and design of field investigation methods.
- Management and technical supervision of a groundwater resource evaluation for Anheuser-Busch Companies in the Coastal Plain of Virginia. Studies included assessing the hydrogeological conditions of the area and determination of the sustainable yield and quality of the water with respect to supporting a groundwater withdrawal of 6.0 million gallons per day. Studies included groundwater modeling of the area using USGS model inputs, identifying the state's permitting requirements, and assessing the feasibility of using ground water (both quantity and quality) as an alternative water source for an industrial facility.
- Management and technical supervision of a groundwater resource evaluation for Banyan Corporation in the Coastal Plain of Maryland for a 14,000-person planned development. Studies included the design and installation of test wells, aquifer tests, analysis of data, and assessment of the sustainable yield of the aquifer and the impact of its use on surrounding communities at a planned withdrawal of 3.0 million gallons per day. Duties also included supporting the Groundwater Apparition Permit, presenting study findings in public meetings, and providing expert testimony in a contested case hearing before a Maryland State Administrative Hearing judge.
- Management and technical supervision of a hydrogeological investigation of a spring-fed wetland containing endangered plant species in the Piedmont of Maryland. Studies included a detailed evaluation of the hydrogeological system to determine the recharge area of the aquifer feeding the wetland, drilling test wells, and conducting long-term (21-day) aquifer tests to evaluate the effect of potential groundwater withdrawal on the wetland. Following the data evaluation, an innovative recharge system was designed to supplement groundwater recharge that may be lost due to the covering of a portion of the recharge area by development.
- Preparation of major contamination surveys/remedial

investigations at Newport Army Ammunition Plant, Indiana. Work involved supervising monitoring well installation, remote-control soil borings, soil sampling, conducting slug tests, analyzing data, and preparing reports.

- Direction of a hydrogeologic investigation of a fiberglass plant in the North Carolina Piedmont, including well installation, soil gas survey, groundwater and soil sampling, data analysis, and report preparation.
- Design and conduct of aquifer tests, and interpretation of data at the Defense General Supply Center (DGSC), Richmond, Virginia; Sunflower Army Ammunition Plant, Desoto, Kansas; and numerous industrial sites.
- Participation in hydrogeologic analyses at the Joppa sand and gravel site for the Maryland Environmental Service.
- Supervision of soil gas sampling at the U.S. Air Force Willow Grove Air Reserve Facility, Pennsylvania. Participated in boring and well installation; logged holes, supervised drilling, and collected soil samples.

Drilling Project Supervisor

- Drilling and logging of test auger holes; processing of retrieved samples; responsibility for the planning and completion of drilling projects.

Research Assistant

- Conduct of field mapping in the northeast Georgia Coastal Plain. Examination of microfossils in Eocene-aged calcareous sediments.

PUBLICATIONS

Establishing Cleanup Levels for Recreational Land Use, Joliet Army Ammunition Plant, Illinois. Scott A. McClelland, Dames & Moore; Janet Kim, USAEC; and Alan Leinbach, Dames & Moore. 12th Annual Conference of Contaminated Soils, University of Massachusetts, Amherst, October 20-23, 1997.

Impact of the Military Munitions Rule of Planned Remedial Actions at the Open Burn/Open Detonation Area, Joliet Army Ammunition Plant, Illinois, and Nationwide. Scott A. McClelland. UXO Forum, '98, Anaheim, California, May 5-7, 1998.

Innovations in Bioremediation Technologies for Treatment of Explosives Contaminated Soils. Rosa Gwinn, Dames & Moore and Scott McClelland, Dames & Moore. 11th Annual

Meeting of the U.S./German Environmental Data Exchange Agreements, Sponsored by U.S. Army Edgewood Research, Development, & Engineering Center, Aberdeen Proving Ground, Maryland, 20-24 April, 1998.

CURRICULUM VITAE

DANA L. HARRIS

Title Project Environmental Scientist

Expertise Phase I and II Environmental Assessments
Asbestos Management

Experience Mr. Harris has more than 8 years of experience in the environmental field. He has performed Phase I assessments throughout the United States, Phase II and RI/FS investigations in the United States and U.S. territories, asbestos surveys in the United States and South America, and asbestos abatement monitoring in Virginia and Washington, D.C.

- Managed and performed Phase I Environmental Assessments for national land development company. Activities included interaction with client representatives, proposal preparation, organization and coordination of inspection teams from nationwide Dames & Moore offices, and interaction with regulatory agencies. Identified potential liability issues and developed Phase II investigations to evaluate significant risks.

- Managed and performed Environmental Due Diligence and subsurface investigation of metals processing and electroplating facility in Gary, Indiana. Using limited preliminary groundwater data, identified potential hexavalent chromium contaminant plume within shallow groundwater. Using skid-mounted drilling equipment, installed soil borings and groundwater monitoring wells within interior of electroplating facility and in exterior areas. Conducted periodic groundwater monitoring, evaluated analytical results, and performed statistical evaluation of groundwater quality data. Established periodic groundwater monitoring program using threshold contaminant concentrations derived from onsite contaminant concentrations.

- Managed Phase I Environmental Assessment of former coal gas storage facility in Rochester, New York. Identified possible historic coal gas manufacturing operations onsite and delineated extent of known onsite gas storage operations. Identified potential soil and groundwater contaminants and developed plan for investigation of subsurface conditions. Managed Phase II investigation, which included geophysical survey, test pit investigation, direct push soil and groundwater sampling, and bedrock well installation and sampling.

- Managed investigation and remediation of gasoline contamination identified in high-profile downtown Washington, DC construction site. Coordinated investigation with DC regulatory agencies. Provided environmental consultation to construction teams and aided construction companies in maintaining original construction schedule. Project included subsurface soil and groundwater investigation, delineation and removal of contaminated soils, and development of dewatering/groundwater treatment system.

- Conducted Phase I Environmental Assessment of multiple-building hotel, office, and retail facility in Washington, D.C. Managed UST upgrade activities at hotel.